Motor Protection Circuit Breaker
J7MN

MPCB system

- Rotary and switch types
- Rated operational current 32 A, 63 A and 100 A
- Switching capacity up to 100 kA/400 V
- Fixed short-circuit release = 13 x I_u
- Overload release adjustable 0.65 - 1 x I_u
- Motor protection CLASS 10
- Fulfill all needed standards

Options

- ON/OFF indication
- Trip alarm/indication
- Undervoltage release
- Shunt release
- Three phase busbar system
- Moulded plastic enclosures
- Door coupling rotary mechanisms
- Insulated Link modules

Ordering Information

■ Model Number Legend

1. Motor Protection Circuit Breaker

J7MN-□□-□□□
1 2 3

1) Motor Protection Circuit Breaker
2) Type/range
3) Setting range

2. Options for MPCB

J77MN-□□-□□□
1 2 3

1) Options MPCB
2) Auxiliary contacts
   T: Trip indicator
   U: Undervoltage release
   S: Shuntrelease
   DC: Door-coupling
   HU: DIN-rail adaptors
   V: Link modules
   PF: Enclosure
3) Other specifications

3. Busbars, line side terminals and shrouds

J75-□□□-□□□
1 2 3

1) Options MPCB
2) CPM: Busbars
   BTC: Line side
   TA: Shrouds
3) Other specifications

■ System overview

Motor Protection Circuit Breaker

	Rated Current In A	Suitable for motors 3~400 V kW	Setting range Thermal Overload Release A	Instantaneous Short Circuit Release A	Short Circuit Breaking Capacity at 3~400 V kA (Icu)	Type
J7MN-3P	0.16	-	0.10 - 0.16	2.1	100	**J7MN-3P-E16**
	0.25	0.06	0.16 - 0.25	3.3	100	**J7MN-3P-E25**
	0.4	0.09	0.25 - 0.4	5.2	100	**J7MN-3P-E4**
	0.63	0.18	0.4 - 0.63	8.2	100	**J7MN-3P-E63**
	1	0.25	0.63 - 1	13	100	**J7MN-3P-1**
	1.6	0.55	1 - 1.6	20.8	100	**J7MN-3P-1E6**
	2.5	0.75	1.6 - 2.5	32.5	100	**J7MN-3P-2E5**
	4	1.5	2.5 - 4	52	100	**J7MN-3P-4**
	6	2.2	4 - 6	78	100	**J7MN-3P-6**
	8	3	5 - 8	104	100	**J7MN-3P-8**
	10	4	6 - 10	130	50	**J7MN-3P-10**
	13	5.5	9 - 13	169	50	**J7MN-3P-13**
	17	7.5	11 - 17	221	20	**J7MN-3P-17**
	22	7.5	14 - 22	286	15	**J7MN-3P-22**
	26	11	18 - 26	338	15	**J7MN-3P-26**
	32	15	22 - 32	416	15	**J7MN-3P-32**
J7MN-3R	0.16	-	0.10 - 0.16	2.1	100	**J7MN-3R-E16**
	0.25	0.06	0.16 - 0.25	3.3	100	**J7MN-3R-E25**
	0.4	0.09	0.25 - 0.4	5.2	100	**J7MN-3R-E4**
	0.63	0.18	0.4 - 0.63	8.2	100	**J7MN-3R-E63**
	1	0.25	0.63 - 1	13	100	**J7MN-3R-1**
	1.6	0.55	1 - 1.6	20.8	100	**J7MN-3R-1E6**
	2.5	0.75	1.6 - 2.5	32.5	100	**J7MN-3R-2E5**
	4	1.5	2.5 - 4	52	100	**J7MN-3R-4**
	6	2.2	4 - 6	78	100	**J7MN-3R-6**
	8	3	5 - 8	104	100	**J7MN-3R-8**
	10	4	6 - 10	130	100	**J7MN-3R-10**
	13	5.5	9 - 13	169	100	**J7MN-3R-13**
	17	7.5	11 - 17	221	50	**J7MN-3R-17**
	22	7.5	14 - 22	286	50	**J7MN-3R-22**
	26	11	18 - 26	338	50	**J7MN-3R-26**
	32	15	22 - 32	416	50	**J7MN-3R-32**
J7MN-6R	26	12.5	18 - 26	338	50	**J7MN-6R-26**
	32	15	22 - 32	416	50	**J7MN-6R-32**
	40	18.5	28 - 40	520	50	**J7MN-6R-40**
	50	22	34 - 50	650	50	**J7MN-6R-50**
	63	30	45 - 63	819	50	**J7MN-6R-63**
J7MN-9R	63	30	45 - 63	819	50	**J7MN-9R-63**
	75	37	55 - 75	975	50	**J7MN-9R-75**
	90	45	70 - 90	1170	50	**J7MN-9R-90**
	100	-	80 - 100	1300	50	**J7MN-9R-100**

Accessories

	Description	Mounting place	Max. per MPCB	Contacts NO	Contacts NC	Rated Operating Current AC15 24 V A	AC15 240 V A	AC1 240 V A	Type
Transverse Auxiliary	Contact block	Front	1	1	1	3	2	5	**J77MN-11F**
				2	-	3	2	5	**J77MN-20F**
				-	2	3	2	5	**J77MN-02F**
Side Auxiliary	Contact block	Left hand side	1	1	1	6	4	10	**J77MN-11S**
				2	-	6	4	10	**J77MN-20S**
				-	2	6	4	10	**J77MN-02S**
Any Trip Alarm	Signalling switch	Left hand side	1	1	1	6	4	10	**J77MN-TA-11S**
Short circuit Trip Alarm	Signalling switch	Left hand side	1	1	1	6	4	10	**J77MN-T-11S**

	Description	Mounting place	Max. per MPCB	Rated voltages	Type
Undervoltage Release	Trips the circuit-breaker when the voltage is interrupted. Prevents the motor from being restarted accidentally when the voltage is restored, suitable for EMERGENCY STOP acc. to VDE 0113	Right hand side	1	24 V 50 Hz, 28 V 60 Hz	**J77MN-U-24**
				110 - 127 V 50 Hz, 120 V 60 Hz	**J77MN-U-110**
				220 - 230 V 50 Hz, 240 - 260 V 60 Hz	**J77MN-U-230**
				240 V 50 Hz, 277 V 60 Hz	**J77MN-U-240**
				380 - 400 V 50 Hz, 440 - 460 V 60 Hz	**J77MN-U-400**
				415 - 440 V 50 Hz, 460 - 480 V 60 Hz	**J77MN-U-415**
Shunt Release	Trips the circuit-breaker when the release coil energized.	Right hand side	1	24 V 50 Hz, 28 V 60 Hz	**J77MN-S-24**
				110 - 127 V 50 Hz, 120 V 60 Hz	**J77MN-S-110**
				220 - 230 V 50 Hz, 240 - 260 V 60 Hz	**J77MN-S-230**
				240 V 50 Hz, 277 V 60 Hz	**J77MN-S-240**
				380 - 400 V 50 Hz, 440 - 460 V 60 Hz	**J77MN-S-400**
				415 - 440 V 50 Hz, 460 - 480 V 60 Hz	**J77MN-S-415**

	Description		Type
Enclosure	Plastic enclose with rotary operating mechanism, lockable space for aux. contact + release		**J77MN-PF-3R**
	Enclose with rotary operating mechanism yellow - red, lock space for aux. contact + release		**J77MN-PFC-3R**
Door-coupling rotary	The door-coupling rotary operating mechanisms consist of a knob, a coupling driver and an extension shaft (5 mm x 5 mm, lenght 330 mm). The door-coupling rotary operating mechanisms are designed for degree of protection IP 65. The door locking device prevents accidental opening of the cubicle door in the ON position of the circuit-breaker. The OFF position can be locked with up to 3 padlocks.	Mechanism black, with supporting bracket	**J77MN-DC-B**
		Mechanism; red/yellow, with supporting bracket	**J77MN-DC-RY**
Link modules	Mechanical and electrical connection between Motor Protection Circuit Breaker and Contactor. Up-to max. 32 A.	Mini Motor Contactor J7KNA	**J77MN-VKA-3**
		Motor Contactor J7KN	**J77MN-VKN-3**
		Motor Contactor J7KNG	**J77MN-VKG-3**
	Electrical connection between Motor Protection Circuit Breaker and Contactor.	Up-to 32 A	**J77MN-VD-3**
		Up-to 63 A	**J77MN-VD-6**
			J77MN-VDG-6
		Up-to 100 A	**J77MN-VD-9**

DIN-rail adaptors	For mechanical fixing of circuit-breaker and contactor. With two moveable DIN-rail clips for easy mounting & replacing. Can be connected to one 35W x 15H mm DIN-rail or two 35W x 7.5H mm DIN-rails.	For J7MN-3 and J7KN(G)-10 up-to J7KN(G)-40	**J77MN-HU-3**
	For mechanical fixing of circuit-breaker and contactor. Can be connected to one 35W x 15H mm DIN-rail or two 35W x 7.5H mm DIN-rails.	For J7MN-6 and J7KN(G)-24 up-to J7KNG-40 and/or J7KN-62	**J77MN-HU-6**
		For J7MN-9 and J7KN-50 up-to J7KN-74	**J77MN-HU-9**
Scale cover sealable	for covering the current setting scale (1 bag with 10 units)		**J77MN-K**
Push-in lugs	for screwing the circuit-breaker onto mounting plates. 2 units required (1 bag with 20 units)		**J77MN-L**
Insulation barriers	Up to 600 V acc.UL 489 for increased distances and clearances acc. to UL Type "E“ 4 pcs per device (2 pcs on each side) (pack 2 units)		**J77MN-TB32**
			J77MN-TB100

Insulated 3-Phase Busbar System

Description	Version	For Units (MPCB)	Pack pcs	Type
3-phase busbars modular spacing = 45 mm In = 64 A[*1]	for 2 units	J7MN-3P J7MN-3R	1	**J75-CPM-2-45-6**
	for 3 units		1	**J75-CPM-3-45-6**
	for 4 units		1	**J75-CPM-4-45-6**
	for 5 units[*2]		1	**J75-CPM-5-45-6**
3-phase busbars modular spacing = 54 mm In = 64 A[*1]	for 2 units	J7MN-3P J7MN-3R	1	**J75-CPM-2-54-6**
	for 3 units		1	**J75-CPM-3-54-6**
	for 4 units		1	**J75-CPM-4-54-6**
	for 5 units[*2]		1	**J75-CPM-5-54-6**
3-phase busbars modular spacing = 54 mm In = 120 A[*1]	for 2 units	J7MN-6R	1	**J75-CPM-2-54-12**
	for 3 units		1	**J75-CPM-3-54-12**
	for 4 units[*2]		1	**J75-CPM-4-54-12**
3-phase busbars modular spacing = 63 mm In = 120 A[*1]	for 2 units	J7MN-9R	1	**J75-CPM-2-63-12**
	for 3 units		1	**J75-CPM-3-63-12**
	for 4 units[*2]		1	**J75-CPM-4-63-12**
Shrouds for unused terminals on the busbar system	fo			

[*1] The sum of all added currents per module must not exeed the above mentioned nominal currents!
[*2] For more than 5 units (64 A) and 4 units (120 A) the system can be extended accordingly by installing an additional busbar